

L 35397-66 T JK
ACC NR: AP6026855

SOURCE CODE: RU/0023/66/011/002/0127/0138

AUTHOR: Sergiescu, Dina--Serdzhiyesku, D. (Doctor); Klein, R.--Kleyn, R. (Doctor);
Dinculescu, M.--Dinkulesku, M. (Doctor); Buimovici-Klein, Elena--Buynovich-Kleyn, Ye.
(Doctor) 3/

ORG: [Sergiescu; Klein] Poliomylitis Vaccine Section, "Dr. In Cantacuzino" Institute,
Bucharest(Sectia vaccin poliomieltic, Institutul "Dr. In Cantacuzino"); [Dinculescu;
Buimovici-Klein] Enterovirosis Section, "Dr. In Cantacuzino" Institute, Bucharest
(Sectia enteroviroze, Institutul "Dr. In Cantacuzino")

TITLE: Value of intra-type serum differentiating reaction in type 3 polio virus
identification 6

SOURCE: Microbiologia, parazitologia si epidemiologia, v. 11, no. 2, 1966, 127-138

TOPIC TAGS: virus disease, vaccine, antigen

ABSTRACT: The authors studied the intra-type differentiation of type 3 polio viruses by means of the Wecker test. Preparation of guinea pig and rabbit sera with the aid of various antigens showed the advantage of using rabbits immunized with concentrated virus suspensions. The method was found useful to check identity of the vaccines with the seeding virus as well as to assess the antigenic relations of strains isolated from patients with the types used for vaccination. The histopathologic examination was performed at the Laboratory for the Control of Poliomylitis Vaccination by Doctor M. Zamfirescu. The authors thank Medical Assistants Ileana Brucker, Ana Tanasescu, C. Lazarescu and I. Georgescu for their valuable technical assistance.

Orig. art. has: 3 tables. /Based on authors' Eng. abst. / JPRS: 36,834/
SUB CODE: 06 / SUBM DATE: 19Dec64 / ORIG REF: 001 / OTH REF: 018
Card 1/1 128 UDC: 576.858.23.093.3

09/6 2610

SERGIESCU, V.

SCIENCE

Periodicals: STUDII SI CERCETARI DE FIZICA. Vol. 6, no. 2, Apr./June 1955

SERGIESCU, V. Surface conditions of crystalline dielectrics. p. 349.

Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 2,
February 1959, Unclass.

RUMANIA/Solid State Physics - Solid State Theory.
Crystallography.

E

Abs Jour : Ref Zhur Fizika, No 11, 1959, 24901

Author : Sergiescu, V.

Inst :

Title : On the Heat Conduction of Molecular Crystals with
Interval Rotation.

Orig Pub : Studii si cercetari fiz. Acad. RPR, 1958, 9, No 4, 451-
457

Abstract : To determine the influence of internal rotation on the
specific heat conduction of a molecular crystal, a linear
relation is introduced between the coefficient of the po-
tential energy and the Fowler rotation parameter. A
semi-quantitative discussion is given of the changes that
are localized in the Peierls regions, obtained for the
curve of specific heat conduction versus the temperature.

Card 1/1

- 45 -

RUMANIA/Solid State Physics - Solid State Theory - Crystallography. E

Abs Jour : Ref Zhur Fizika, No 4, 1960, 8640

Author : Sergiescu, V.

Inst : ~~university of Bucharest~~

Title : Modification of the Pauling-Fowler Model in the Theory of Internal Rotation of Crystals.

Orig Pub : Studii si cercetari fiz., 1959, 10, No 1, 99-109

Abstract : The author considers cooperative phenomena in molecular crystals, connected with the internal rotation of molecules. A modification is introduced to the theory of Pauling and Fowler (Fowler R.H., Proceedings Royal Society, 1935, A 149, 1), according to which the state of the system is characterized by an individual cooperative long-range order parameter Ω , which vanishes in the phase transition. The author takes it into consideration that owing to anisotropy the moment of the forces acting on the molecules does not vanish when Ω

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temperatures above the transition temperature. The generalization of the theory, in the author's opinion, leads to a better agreement between theory and experiment, particularly to the appearance of a continuous variation in the specific heat with a sharp maximum instead of jump like behavior. The introduced cooperative parameter vanishes only at an infinitely high temperature. --
M.A. Krivoglaz

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120009-1

Card 2/2

- 56 -

RUMANIA/Electricity - Dielectrics

E-2

Abs Jour : Ref Zhur - Fizika, No 2, 1959, No 3540

Author : Sergiescu V.

Inst : ~~university of Bucharest~~

Title : Electrical Properties of Solid Dielectrics

Orig Pub : Gaz. mat. si fiz., 1956, A10, No 5, 265-277

Abstract : No abstract

SENGIEJ, A., Inz.

Assembling a bridge with a crane. Przegl budowl i bud mieszk
33 no. 10:635-636 0 '61.

CZECHOSLOVAKIA/ SOVIET RUSSIA

SERGIJEVSKIJ, M.G.: Medical Institute [Original version not given], Kuybysev, Russia.

"The Breathing Center and the Dynamic Functional Constellations of the Breathing Regulating Centers."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, p 69

Abstract: The breathing center is a section of the extended spinal cord damage to which irreversibly stops breathing. Some parts of the CNS influence the manner of breathing. The influence of the brain and specific parts of it on breathing are described. In some animals when the brain is completely removed, some imperfect breathing still persists. The breathing center proper ensures only the breathing cycle; adaptation to definite conditions of the organism depends on the afferent signals from all functional systems to different areas of the CNS. These signals form dynamic associations or constellations of the centers. No references. Submitted at the "16 Days of Physiology" at Kosice 27 Sep 65.

1/1

SERGIJEV, I., inzh.

Prophylaxis and the extinguishing of mine fires in the Bobov Dol coal basin. Min delo 18 no. 11: 41-43 N '63.

1. DMP "Bobov Dol".

L 28047-66 EWT(1) RO

ACC NR: AP6018177

SOURCE CODE: UR/0239/65/051/006/0723/0731

AUTHOR: Sergieviskiy, M. V.; Gabdrakhmanov, R. Sh.; Nenashev, A. A. 23
B

ORG: Department of normal physiology, Medical Institute, Kuybyshev (Kafedra normal'noy fiziologii meditsinskogo instituta)

TITLE: Automatic activity of the respiratory center 22

SOURCE: Fiziologicheskii zhurnal, v. 51, no. 6, 1965, 723-731

TOPIC TAGS: cat, brain, biologic respiration, pharmacology.

ABSTRACT: The action of a number of drugs blocking adreno- and cholinoreactive systems was studied on local application to the cerebral respiratory center of cats. Cocaine (blocking adreno- and cholinoreactive systems), aminazine, dihydroergotoxin (blocking adreno- and cholinoreactive systems), atropine (blocking m-cholinoreactive systems), diphacyl (blocking m-cholinoreactive systems and to some extent n-cholinoreactive systems), and tropacine (blocking principally n-cholinoreactive systems) were applied. Blocking of adreno- and cholinoreactive systems with dihydroergotoxin produced an irreversible stoppage of respiration, whereas the effect of agents that stopped respiration by blocking m- and n-cholinoreactive systems was counteracted by intravenous injection of adrenaline or noradrenaline. Combined application of adrenaline, eserine,

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ACC NR: AP6018177

and acetylcholine had a stronger effect in restoring respiration after adrenoactive and cholinoreactive systems were blocked than administration of one of these substances, but was ineffective on application of dihydroergotoxin. As compared with adrenaline, eserine and acetylcholine were ineffective in restoring respiration (e. g., after stoppage of respiration by means of cocain.) The results obtained indicated that the activity of the respiratory center depends on a flow of afferent impulses to it and that functioning of adrenoactive systems is of greater importance for its activity as compared with that of cholinoreactive systems, although both types of system are essential for the maintenance of connections over which the flow of afferent impulses takes place. Orig. art. has: 6 figures. /SPRS/

SUB CODE: 06/ SUBM DATE: 27Jan64/ ORIG REF: 012/ OTH REF: 014

Card 2/2 L.C.

MESHALKIN, Ya.N.; ERGIFVSHIY, V.G.

Surgical correction of coronary artery disease. Young Inst.
klin. i eksper. kard. AN Gruz. SSR 4: 13-63; '63. (MIRA 13.0)

1. Institut eksperimental'noy biologii i meditsiny Akademiya
otdeleniya AN SSSR, Novosibirsk.

SERGIJE, T.

Sampling sugar beets in 1954. p 5. POLJOPRIVREDA. (Društvo
poljoprivrednih inženjera i tehničara NR Srbije) Beograd.
Vol. 4, no.1, Jan. 1956.

SOURCE:

East European Accessions List, (EEAL)
Library of Congress Vol. 5, no. 11, Nov. 1956.

5(2)

AUTHORS:

Okunev, A. I., Kiryanov, A. K.,
Gogin, B. I.

SOV/20-124-6-28/55

TITLE:

Equilibrium Conditions in the Reduction of Zinc Oxide With
Metallic Iron (Ravnovesnyye usloviya vosstanovleniya okisi
tsinka metallicheskim zhelezom)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 6,
pp 1282-1284 (USSR)

ABSTRACT:

The distillation of zinc in fuming of the zinc containing
slags is also determined by the reaction mentioned in the
title. The equilibrium conditions of this reaction are,
however, experimentally not investigated (Refs 1,2). The
present paper gives a short survey of the results of such
an investigation of the reaction $\text{Fe}_{(\text{solid})} + \text{ZnO}_{(\text{solid})} =$
 $\text{FeO}_{(\text{solid})} + \text{Zn}_{(\text{gaseous})}$ (a). Table 2 shows the results of
the thermodynamic analysis of the reaction (a) and the
by-products (according to reference 3). The equilibrium
conditions of the reaction (a) were investigated according to
the previously employed method (Ref 4). Table 3 and figure 1
give the results. In this connection the

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Equilibrium Conditions in the Reduction of Zinc Oxide SOV/20-124-6-28/55
With Metallic Iron

by-reactions (b) and (v) have to be considered. Table 4 shows their thermodynamic analysis, from where it was to be seen that the pressure of zinc, developed as a result of this reaction is much weaker than the vapor tension of the main process. It was therefore possible to neglect the action of reactions (b) and (v) upon reaction (a). It is, however, true that the equilibrium tension in reactions (b) and (v) surpasses the zinc-vapor tension in connection with fuming of the slag by its manifold. Under certain conditions the interactions can be used for practical purposes. As it can be seen from figure 1 and the comparison of the data of tables 2 and 3 the experimentally found values of the equilibrium constants of the reaction (a) agree satisfactorily with the values computed. The same holds for ΔH_0 which was calculated by the method of the ϕ -function. This may serve as an indirect proof for the lacking influence of the by-processes. Finally, equations are given for the temperature dependence of the variation of the isobaric potential. There are 1 figure, 4 tables, and 6 Soviet references.

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Equilibrium Conditions in the Reduction of Zinc Oxide SOV/20-124-6-28/55
With Metallic Iron

ASSOCIATION: Ural'skiy nauchno-issledovatel'skiy i proyektnyy institut
mednoy promyshlennosti (Ural Scientific Research and
Planning Institute of Copper Industry)

PRESENTED: October 6, 1958, by S. I. Vol'fkovich, Academician

SUBMITTED: October 4, 1958

Card 3/3

5(1, 2)
AUTHORS:

Okunev, A. I., Kir'yanov, A. K.,
Sergin, B. I.

SOV/20-125-1-39/67

TITLE:

Equilibrium Conditions in the Interaction Between
Cadmium Oxide and Cadmium Sulphide (Usloviya ravnovesiya
pri vzaimodeystvii okisi kadmiya s sul'fidom kadmiya)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 1,
pp 147-148 (USSR)

ABSTRACT:

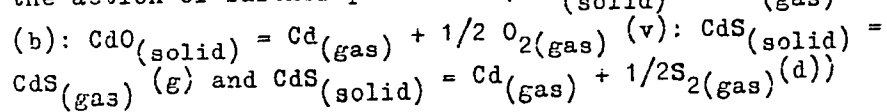
The conditions mentioned in the title are not yet
experimentally investigated. The interaction mentioned
is, however, of great practical importance to the analysis
of the behavior of cadmium in pyrometallurgical processes.
Up to now computed data were used for these purposes.
In this paper the results of an experimental investigation
of the mentioned conditions of the reaction: $2 \text{CdO}_{(\text{solid})} +$
 $\text{CdS}_{(\text{solid})} = 3\text{Cd}_{(\text{gas})} + \text{SO}_2_{(\text{gas})}$ (a) are described and
compared to the results of the computation. The thermodynamic
analysis of reaction (a) was carried out according to the
method of reference 1 by using the thermodynamical data
(Refs 2, 3, Table 1). The results are summarized on table 2.

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Equilibrium Conditions in the Interaction Between
Cadmium Oxide and Cadmium Sulphide

SOV/20-125-1-39/67

The experimental investigation was carried out according to the earlier method (Ref 5). Table 3 gives the experimental results and the equilibrium constants computed herefrom as well as the variation of the isobaric potential and of the cadmium vapor pressure at the experimental temperatures. The sublimation and dissociation pressure of cadmium oxide is lower by many times than that of cadmium sulphide. Therefore the action of further processes $(\text{CdO}_{(\text{solid})} = \text{CdO}_{(\text{gas})})$



could be taken into account on the basis of experimental data on the sublimation and dissociation of cadmium sulphide (Ref 5). In this connection it was found that the yield of products is within the range of errors due to by-processes and can be neglected. The variation of the enthalpy of the system at 298° K (ΔH_{298°)

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computed from the experimental results was 162400 cal/mol,

Equilibrium Conditions in the Interaction Between
Cadmium Oxide and Cadmium Sulphide

SOV/20-125-1-39/67

as compared to 168200 cal/mol according to the calorimetric measurements. The experimental data can be satisfactorily expressed by 2 equations. Figure 1 shows a comparison of the computed and experimental values of the equilibrium constants of the reaction (a). There are 1 figure, 3 tables, and 5 Soviet references.

ASSOCIATION: Ural'skiy nauchno-issledovatel'skiy i proyektnyy institut
mednov promyshlennosti (Ural Scientific Research and
Design Institute of the Copper Industry)

PRESENTED: October 6, 1958, by S. I. Vol'fkovich, Academician

SUBMITTED: October 4, 1958

Card 3/3

SERGIN, Ivan Nazarovich; TOPOL'NITSKAYA, L.P., red.

[Creep of concrete in road and bridge structures] Pol-
zuchest' betona v dorozhno-mostovykh sooruzheniakh. Mc-
skva, Transport, 1965. 146 p. (MIRA 18:4)

KOCHNEV, M.I.; OKUNEV, A.I.; MYASNIXOV, P.A.; VERMENICHEV, S.A.; SERGIN,
B.I.; STRIZHOV, G.V.

Smelting Ural copper-zinc concentrates in suspension with oxygen
blow. TSvet. met. 33 no.10:20-23 O '60. (MIRA 13:10)

1. Ural'skiy filial Akademii nauk SSSR; Ural'skiy nauchno-issledovatel'-
skiy i proyektnyy institut mednoy promyshlennosti i Vsesoyuznyy
nauchno-issledovatel'skiy institut metallurgicheskoy teplotekhniki.
(Ural Mountains--Nonferrous metals--Metallurgy)
(Oxygen--Industrial applications)

SERGIN, B.I. (Sverdlovsk); YESIN, O.A. (Sverdlovsk); LEPINSKIKH, B.M. (Sverdlovsk)

Kinetics of the interaction of copper sulfide and cuprous oxide. Izv. AN
SSSR. Otd. tekhn. nauk. Met. i gor delo no.1:87-90 Ja-F '63.
(MIRA 16:3)

(Copper—Metallurgy)

KOCHNEV, M.I.; OKUNEV, A.I.; MYASHNIKOV, P.A.; VERMENICHEV, S.A.;
SERGIN, B.I.; STRIZHOV, G.F.

Smelting Ural copper-zinc concentrates in suspension with
an oxygen blow. Trudy Inst. met. UFAN SSSR no.8:17-31 '63.
(MIRA 17:9)

KOCHNEV, M.I.; OKUNEV, A.I.; MYASNIKOV, P.A.; VERMENICHEV, S.A.;
SERGIN, B.I.; BAZHANOV, L.N.

Smelting sulfide materials in an oxygen-enriched flame
without the use of a carbonaceous fuel. Trudy Inst. met.
UFAN SSSR no.8:33-42 '63. (MIRA 17:9)

DEYEV, V.I.; OKUNEV, A.I.; KOCHNEV, M.I.; VERMENICHEV, S.A.; SERGIN, B.I.

Behavior of rare and disseminated elements during the smelting
of sulfide concentrates with oxygen. Trudy Inst. met. UFAN
SSSR no.8:43-50 '63. (MIRA 17:9)

SERGIN, S.A.; PETROV, R.V.

Small size P-76-Sh04 spinning machine. Tekst. prom. 19 no.5:26-28
My '59. (MIRA 12:10)

1.Starshiy inzh.-konstruktor Penzenskogo mashinostroitel'nogo
zavoda (for Sergin). 2.Starshiy inzhener ispytatel'noy stantsii
Penzenskogo mashinostroitel'nogo zavoda (for Petrov).
(Spinning machinery)

ACC NR: AP7001899

UR/0020/66/171/004/0923/0926

AUTHOR: Sergin, S. Ya.; Sergin, V. Ya.

ORG: Institute of Geography, Academy of Sciences SSSR (Institut geografii Akademii nauk SSSR)

TITLE: "Earth's surface-atmosphere" as an automatic control system

SOURCE: AN SSSR. Doklady, v. 171, no. 4, 1966, 923-926

TOPIC TAGS: ~~geophysical model, terrestrial model, climatology, climatological~~
~~theory~~ *earth planet, automatic control system,*
atmosphere, ocean current

ABSTRACT: This article presents results of research related to the Quaternary period in which the Earth's surface (land, oceans) and the atmosphere are treated as a closed automatic control system. [The dynamics of this system can be explained by changes of the physiographic situation during the Earth's history.] This system comes under the influence of a complex of external actions, some of which change in time. The system is nonlinear and essentially static, and proportional control is the principle used. At the current level of knowledge information on properties of the system and external actions is still incomplete; however, the first examination and rough calculations show the possibility of mathematically expressing the system and its modeling. The example used in the article pertains

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UDC: 551.583

ACC NR: AP7001899

to glacial and interglacial periods. The paper was presented by Academician
I. P. Gerasimov 27 May 1966. Orig. art. has: 2 figures.

SUB CODE: 08,13/ SUBM DATE: 25May66/ ORIG REF: 008/ OTH REF: 002

Card 2/2

ACC NR: AP7001899

to glacial and interglacial periods. The paper was presented by Academician
I. P. Gerasimov 27 May 1966. Orig. art. has: 2 figures.

SUB CODE: 08,13/ SUBM DATE: 25May66/ ORIG REF: 008/ OTH REF: 002

Card 2/2

L 62704-65 EEC(b)-2/ET(1)/ET(m)/ENP(b)/T/ENP(t) Pi-L IJP(c) JD/GG
 ACCESSION NR: AP5019919 UR/0202/65/000/004/0016/0020

34
 33
 B

AUTHOR: Mamayev, S.; Nazarov, A.; Dovletmuradov, Ch.; Serginov, M.

TITLE: CdSnAs₂ single crystals and their electrical properties

SOURCE: AN Turkmen SSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh i geologicheskikh nauk, no. 4, 1965, 16-20

TOPIC TAGS: ternary compound semiconductor, cadmium tin arsenide, polycrystal synthesis, single crystal growth, electrical property

ABSTRACT: The similarity in electrical parameters of CdSnAs₂ and the InAs compound semiconductor prompted the study of methods for preparing CdSnAs₂ single crystals with a low carrier concentration and investigation of their electrical properties. CdSnAs₂ single crystals, 5-6 cm long, were grown by zone recrystallization of homogeneous polycrystalline CdSnAs₂ ingots which were synthesized from the elements by the usual melting technique. The earlier introduced zone recrystallization technique was modified by the use of argon at atmospheric pressure and additional heating of the ampul in a furnace to minimize dissociation of the molecule and thermal stresses. Multi-pass zone recrystallization and combination of the high and low speeds of zone passes produced p-type single crystals from n-type polycrystals,

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ACCESSION NR: AP5019919

which had $2.3 \times 10^{17} \text{ cm}^{-3}$ impurity concentration at room temperature versus about 10^{18} cm^{-3} for the starting polycrystalline material. The change in conductivity type was tentatively attributed to the presence of extraneous impurities in the single crystals in spite of the fact that purification was achieved by zone-recrystallization. Temperature dependence in the 90—800K range of the Hall constant, electrical conductivity, and Hall mobility of current carriers in the single crystals were determined and plotted on graphs. Nearly constant values of the electrical parameters in the region of low temperatures (to 300K) were explained as ionization of impurities. The forbidden energy gap in the region of intrinsic conductivity (above 400K) was calculated to be 0.3 ev, and Hall mobility at 200K, $316 \text{ cm}^2/\text{v}.\text{sec}$. Orig. art. has: 4 figures. [JK]

ASSOCIATION: Fiziko-tekhnicheskiy institut AN Turkmenkoy SSR (Physicotechnical Institute, AN Turkmen SSR)

SUBMITTED: 11Jan65

ENCL: 00

SUB CODE: SS,EM

NO REF SOV: 001

OTHER: 005

ATD PRESS: 4064

Card 2/2

L 28151-66 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6018094

(N)

SOURCE CODE: UR/0202/66/000/003/0029/0032

AUTHOR: Goryunova, N. A.; Mamayev, S. M.; Prochukhan, V. D.; Serginov, M. 28

ORG: Physicotechnical Institute, AN Turkmen SSR (Fiziko-tehnicheskiiy institut AN Turkmeniskoy SSR)

TITLE: Solid solutions of the CdSnAs_2 - CdGeAs_2 system

SOURCE: An Turkmen SSR. Izvestiya. Seriya fiziko-tehnicheskikh khimicheskikh i geologicheskikh nauk, no. 3, 1966, 29-32

TOPIC TAGS: semiconductor alloy, semiconductor research, solid solution, quaternary alloy, tin containing alloy, cadmium containing alloy, germanium containing alloy, arsenide

ABSTRACT: A series of alloys of the CdSnAs_2 - CdGeAs_2 system have been synthesized and their crystal structure and certain physicochemical properties have been determined to detect the presumed formation of semiconductor solid solutions. Earlier, the Soviet authors prepared CdSnAs_2 and CdGeAs_2 single crystals with chalcopyrite structure, but solid solutions between these two compounds were unknown. All alloys were synthesized from high-purity elements in evacuated quartz ampuls by heating first at 600C, then at 1100C for a period of time. Homogeneous solid solutions were obtained over the entire composition range, as shown by the x-ray,

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L 28454-66

ACC NR: AP6018094

micrographic, and thermal analyses and by microhardness measurements. All the alloys had a chalcopyrite structure with lattice constant a decreasing linearly from 6.092 to 5.94 Å, with CdGeAs₂ content increasing from 0 to 100 mol %, i.e., the composition dependence of a obeyed the Vegard law. The plot of microhardness versus composition displayed a maximum for the alloy of 25 at% CdSnAs₂ and 75 at% CdGeAs₂, but neither thermal nor x-ray analysis confirmed the existence of any inclusions. The phase diagram of the system is characteristic of a continuous series of homogeneous solid solutions. Orig. art. has: 3 figures and 1 table. [JK]

SUB CODE: 20/ SUBM DATE: 03Dec65/ ORIG REF: 003/ OTH REF: 002/ ATD PRESS:

Card 2/2 LC

R U, M...CU

RUMANIA/Chemical Technology. Chemical Products and Their Application.
Leather: Fur. Gelatin. Tanning Agents. Technical Proteins. H-35

Abs Jour: Referat Zhur-Khimiya, No 5, 1958, 16595.

Author : Marcus Sergiu

Inst :

Title : Replacement of Obsolete Technological Processes in the
Leather- Rubber- and Glass Industry by New Processes.

Orig Pub: Ind. usocara, 1957, 4, No 5, 195-196.

Abstract: A review of the work of the Research Institute of Leather,
Rubber and Glass, of the Rumanian People's Republic, in con-
nection with the putting into practice of new techniques.

Card : 1/1

ACC NR: AR7001769

SOURCE CODE: UR/0169/66/000/010/G018/G019

AUTHOR: Zapara, S. A.; Sergiychuk, A. G.; Voznyuk, L. P.; Krupin, V. F.

TITLE: Dependence of the intensity of seismic vibrations on the number of steps of retardation and on the distance from the explosion site

SOURCE: Ref. zh. Geofizika, Abs. 10G120

REF SOURCE: [Sb. nauchn. tr.] N. -i. gornorudn. in-t. USSR, no. 8, 1965, 168-172

TOPIC TAGS: seismic wave, ~~seismic vibrations~~, ~~geologic explosion~~, MINING ENGINEERING, DETONATION

ABSTRACT: The detonation of millisecond delay blasts with shot holes in a grid pattern in the Krivbass [section of the USSR] is difficult because the seismic waves occurring there considerably exceed the safety norm for buildings and installations located within 1 to 1.5 km of the explosion site. Experimental explosions with an identical total weight of explosives were detonated, the bores in the quarries being spaced at 3 to 5 m, generally in one line. For each explosion, two seismic stations were installed over the length of the profile

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UDC: 550.341

ACC NR: AR7001769

(along the granites). The seismographs of each station were divided into two groups and seismic vibrations in three mutually perpendicular directions were recorded at two different points of the profile. The distances from the site of the explosions to the site of the seismographs were constant: 250, 400, 750, and 900 m. Four explosions occurred; with, respectively, 11 bores with a charge of 3115 kg of explosives (with 10 m/sec intervals of delay between the consecutively exploded groups of bores in both cases); 10 bores with 2840 kg of explosives; and 12 bores with 3250 kg of explosives. The delays between bores was 10 m/sec in the third case and 20 m/sec in the fourth. Results of the experimental explosions showed that the total explosive being equal, an increase in the number of groups of charges exploded at different times during the general blast, is always followed by a decrease in the intensity of seismic waves. Division of the total weight of explosives into 10 consecutive groups (9 degrees of delay) decreases the intensity of seismic vibration 4.2 times at a distance of 250 m, and 2.57 times at a distance of 900 m. When a considerable reduction of the seismic effect of mass explosions is necessary, the consecutive explosion of one shot hole after the other must be effected. Otherwise, shot holes should be planned with a maximum possible number of charges exploded at different times. The intensity of the exploded vibrations during millisecond delay explosions depends to a great

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ACC NR: AR7001769

degree on the volume of the delay interval, the decrease or the increase of which is accompanied by an increase in the seismic effect of the explosion. B. Rossi.
[Translation of abstract] [GC]

SUB CODE: 08/

Card 3/3

ARTUGANOV, V. (Voronezh); LEMPERT, M. (Krasnodar); SERGIYENKO, A. (Angarsk);
VORONOV, V. (Astrakhan')

Courage, resourcefulness, skill. Pozh.delo 3 no.10:18 0 '57.
(MIRA 10:11)

(Fire extinction)

SERGIYENKO, A.

Let's improve the organization of labor, the assignment of work norms, and the wage system. Mias.ind.SSSR'26 no.5:32-36 '55.

(MLRA 9:2)

1. Zamestitel' ministra promyshlennosti myasnykh i mlechnykh produktov SSSR.

(Meat industry)

SERGIYENKO, A. (Angarsk); KLEPTSOV, L. (Tomsk); MUSIYENKO, Ye. (Moskva);
NIKOLAYEV, I.; BYCHKOV, G. (Buryatskaya ASSR)

Readers' letters. Pozh.delo 8 no.2:30 F '62.
(Fire prevention)

(MIRA 15:2)

MURASHEV, V., shofer (Khabarovskiy kray); KAKHELASHVILI, M., shofer (g.Tbilisi);
SERGIYENKO, A., shofer (g.Gorlovka); NEKLYAYEV, B., avtomekhanik
(g.Kaunas)

Continuing the discussion on the perfect organization of work.
Avt.transp. 39 no.12:9-10 D '61. (MIRA 15:1)
(Transportation, Automotive)

SERGIYENKO, A., val'tsovshchik

The hands of a rolling mill operator. Metallurg 8 no.7:33
Jl '63. (MIRA 16:8)

1. Metallurgicheskiy zavod im. Kominterna.
(Rolling (Metalwork))

SERGIYENKO, A.

There is also a potential for rolling mill workers. Metallurg
10 no.7:43-44 J1 '65. (MIRA 18:7)

1. Starshiy val'tsovshchik-operator metallurgicheskogo zavoda im.
Kominterna.

SERGIYENKO, A.A.
TRIOUS, P.N.; SERGIYENKO, A.A.

Our experience in preventing accidents. Bezop. truda v prom. 1 no.4;
31 Ap '57. (MIRA 10:6)

1. Tekhnicheskii inspektor TSentral'nogo komiteta profsoyuza rabochikh
chernoy metallurgii (for Trius). 2. Pomoshchnik glavnogo inzhenera po
tekhnike bezopastnosti rudoupravleniya im. Ordzhonikidze.
(Mining engineering--Safety measures)

10(3)

AUTHORS:

Sergiyenko, A. A., Gretsov, V. K.

SOV/20-125-4-15/74

TITLE:

The Transition of the Turbulent Boundary Layer to
a Laminar One (Perekhod turbulentnogo pogranichnogo
sloya v laminarnyy)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 4,
pp 746-747 (USSR)

ABSTRACT:

In the present experimental investigation the "inverse" transition of a turbulent boundary layer to a laminar one in the case of great negative pressure gradients in a supersonic nozzle was determined. The velocity of the main current in the nozzle increased steadily from 45 to 560 m/sec. In the course of these experiments the air was conveyed from a receiver into a cylindrical tube of 76 mm diameter and 100mm length. Behind this tube there was an axially-symmetric supersonic nozzle with a critical cross section of 36 mm diameter; its Mach number at the output was 2.6. The boundary layer was investigated in 2 cross sections: at the end of the cylindrical tube (i. e. immediately before the nozzle), and at the output from the nozzle. The velocity profile in the boundary layer was then calculated from the measuring

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The Transition of the Turbulent Boundary Layer
a Laminar One

SOV/20-125-4-15/74

results. The authors investigated the influence exercised by high negative pressure gradients upon the turbulent boundary layer which develop on the walls of the long tube at a velocity of flow of the air of 45 m/sec and at a total pressure of $P_0 = 0.3 \text{ kg/cm}^3$. The laminar boundary layer had gone over into a turbulent one in the initial part of the tube. If the value $Re_{cr} = wx/\nu = 3.5 \cdot 10^5$ is assumed for the critical Reynold's number, the region of transition is 400 mm distance from the front edge of the transition. The results obtained by measuring the velocity profile in the turbulent boundary layer is shown by a diagram. The velocity distribution in the boundary layer is sufficiently well approximated by the formula $u/u_\infty = (y/\delta)^{1/n}$, where $1/n = 1/9$ holds. At the output of the nozzle, with the average velocity gradient $(du/dx)_{aver} = 2720 \frac{1}{\text{sec}}$, a laminar supersonic boundary

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The Transition of the Turbulent Boundary Layer to SOV/20-125-4-15/74
a Laminar One

layer was detected. The velocity distribution in the latter differs essentially from that in the turbulent boundary layer. For the laminar layer thus determined the index in the major part of the layer has the value $1/2$. These results confirm the existence of an "inverse" transition of the turbulent behavior of the flow in the boundary layer at the input into the nozzle into a laminar behavior at the output from the supersonic nozzle. The laminar boundary layer formed by this transition in no way differs from an ordinary laminar layer, and, above all, it retains its ability of again going over into a turbulent layer. There are 1 figure and 3 references, 1 of which is Soviet.

PRESENTED: November 11, 1958, by G. I. Petrov, Academician

SUBMITTED: November 11, 1958

Card 3/3

SERGIYENKO, A.A.

Find of *Grossilepis* aff. *tuberculata* (Gross) in Upper Devonian
sediments of the Minusinsk Basin. Trudy SNIGGIMS no.15:135-
137 '61. (MIRA 15:9)
(Minusinsk Basin--Asterolepidae)

SERGIYENKO, A.A.

New species *Bothriolepis extensa* sp.n. from the sediments of
the Tuby series in the Minusinsk Basin. Trudy SNIGGIMS no.15:
139-140 '61. (MIRA 15:9)
(Minusinsk Basin--Asterolepidae)

L 00715-66 EMP(m)/ENT(1)/FCS(k)/ETC(m)/ENA(d)/E A(1) WW

ACCESSION NR: AT5013283

UR/3043/65/000/004/0077/0102

AUTHOR: Sergiyenko, A. A.; Sandomirskaya, I. D. 44, 55

TITLE: The shaping of the supersonic portion of an axisymmetric optimum thrust nozzle

SOURCE: Moscow. Universitet. Vychislitel'nyy tsentr. Sbornik rabot, no. 4, 1965. Chislennyye metody v gazovoy dinamike (Numerical methods in gas dynamics), 77-102

TOPIC TAGS: axisymmetric nozzle, nozzle design, supersonic nozzle, supersonic flow, degeneracy 23 44, 55

ABSTRACT: The problem of the optimum shaping of the supersonic portion of the nozzle is studied within the framework of the variational approach. Such degenerated variational problems are solved by means of the coupled variations at the different ends of the extremum curve which allow the positioning of the extremum curve through two assigned points. The basic relationships and the mathematical formulation of the problem are followed by a study of the extremum equation solution, the condition of transversality of the contour with fixed coordinate points, the presentation of the computational methods, a brief analysis of accuracy, and the presentation of the tabulated results. These show that the solution of the degenerated problem coincides with the solution obtained by means of

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L 00715-66

ACCESSION NR: AT5013283

the classical variational calculus of nondegenerate problems. Orig. art. has: 89
formulas, 7 figures, and 4 tables.

ASSOCIATION: Vychislitel'nyy tsentr, Moskovskiy universitet (Computer Center, Moscow
University)

SUBMITTED: 00

ENCL: 00

SUB CODE: ME, MA

NO REF SOV: 007

OTHER: 002

Card

2/2

BORKHVARDT, V.S.; DROZDOVA, I.N.; ZAKHAREVICH, S.F.; KOZLOVSKAYA,
N.V.; MARKOVSKAYA, L.A.[deceased]; MIYAYEV, N.A.;
MURAV'YEVA, O.A.; SERGIYEVSKAYA, Ye.V.; SOKOLOVSKAYA, A.P.;
STANISHCHEVA, O.N.; TAKHTADZHIAN, A.L.; FLOROVSKAYA, Ye.F.;
TSVELEV, N.N.; SHISHKIN, B.K., prof.[deceased]; SHMIDT, V.M.;
DUBROVSKAYA, I.P., red.

[Flora of Leningrad Province] Flora Leningradskoi oblasti.
Leningrad. No.4. 1965. 356 p. (MIRA 18:9)

1. Leningrad. Universitet. 2. Chlen-korrespondent AN SSSR
(for Shishkin).

SERGIYENKO, A. D., FADEYEVA, L. L., and AVAKYAN, A. A.

"Data Concerning the Etiology of Hemorrhagic Fever Accompanied by a Nephritic Syndrome," a report discussed at one of six meetings of the Virological Section, Moscow Dept. All-Union Society of Microbiologists, Epidemiologists, and Infectionists imeni I. I. Mechnikov in 1955. Voprosy Virusologii, 1, No 2, 1956

Sum. 1003, 20 Jul 56

AVAKYAN, A.A.; SERGIYENKO, A.D.; FADYEVA, L.L.

Material on the etiology of hemorrhagic fever with nephritic
syndrome; preliminary report. Vop.virus. 1 no.4:19-25 J1-Ag '56.
(MLRA 10:1)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.
(EPIDEMIC HEMORRHAGIC FEVER, etiology and pathogenesis,
(Rus))

SERGIYENKO, A.D.

Use of chick erythrocyte hemolysis in diagnosing hemorrhagic nephrosonephritis (hemorrhagic fever with renal syndrome) [with summary in English]. Vop.virus 3 no.6:352-357 N-D '58.
(MIRA 12:1)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.
(EPIDEMIC HEMORRHAGIC FEVER, diagnosis
chick embryo hemolysis reaction (Rus))
(HEMOLYSIS,
chick embryo hemolysis reaction in diag. of epidem.
hemorrh. fever (Rus))

SERGIYENKO, A. D., CAND MED SCI, "STUDY OF HEMORRHAGIC
NEPHROSONEPHRITIS IN THE NIDUS OF YAROSLAVSKAYA OBLAST."
Moscow, 1960. (ACAD MED SCI USSR). (KL, 2-61, 219).

-281-

SERGIYENKO, A.D.

Method for inducing the hemolytic reaction in hemorrhagic
nephrosonephritis (Synonym: hemorrhagic fever with renal syndrome).
Vop. virus. 5 no. 1:112-114 Ja-F '60. (MIRA 14:4)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.
(EPIDEMIC HEMORRHAGIC FEVER) (HEMOLYSIS)

SERGIYENKO, A.D.

Studying the possible use of the aldolase reaction in the diagnosis of hemorrhagic nephroso-nephritis. Vop. virus. 7 no.2:244-245 Mr-Apr '62. (MIRA 15:5)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.
(KIDNEYS---DISEASES) (ALDOLASE)

SERGIYEVSKIY, A.D.

Fatigue resistance of riveted joints. Sbor. trud. LIZHT
no.229:61-82 '64. (MIRA 18:8)

SERGIYENKO, A.F.

Total protein and protein fractions in the blood of healthy
children of school age in the hot Turkmenistan climate.
Zdrav. Turk. 8 no.2:7-12 F'64 (MIRA 17:4)

1. Iz kafedry detskikh bolezney (zav. - dotsent V.G. Parshikova)
Turkmenskogo gosudarstvennogo meditsinskogo instituta i Turkmen-
skoy respublikanskoy klinicheskoy bol'nitsy imeni Pirogova
(glavnyy vrach M.B. Shapiro).

SERGIYENKO, A.I.
PIRKO, I.V.; SERGIYENKO, A.I.

Veterinary service in Vinniki District strives to increase the
productivity of collective stockbreeding. Veterinariia 35 no.2:31-34
F '58. (MIRA 11:2)

1.Sekretar' Vinnikovskogo raykoma kommunisticheskoy partii Ukrainy
(for Pirko). 2.Glavnyy vetvrach Vinnokovskogo rayona (for Sergiyenko).
(Vinniki District--Veterinary medicine)

SERGIYENKO, A.I., kand. veter. nauk

Poultry raising in Lvov Province on the road of intensification. Veterinariia 42 no.8:6-7 Ag '65.

(MIRA 18:11)

1. Zamestitel' nachal'nika upravleniya sel'skogo khozyaystva L'vovskoy oblasti.

SERGIYFNEQ, A.I., vetvrach (L'vovskaya oblast', Vinnikovskiy rayon);

SPIVAKOV, A.S., vetvrach (L'vovskaya oblast', Vinnikovskiy rayon)

Use of insulin in proventricular atonias and feed poisonings
in cattle. Veterinariia 35 no.9:78 S '58. (MIRA 11:9)
(Insulin) (Cattle--Diseases and pests)

L 31120-66 EWT(d) BC

ACC NR: AP6007605 (A) SOURCE CODE: UR/0256/66/000/002/0071/0072

AUTHOR: Sergiyenko, A. M. (Engineer, Lieutenant colonel)

ORG: None

TITLE: Operation of DGMK-3 compass 10

SOURCE: Vestnik protivovozdushnoy oborony, no. 2, 1966, 71-72

TOPIC TAGS: aircraft flight instrument, gyrocompass

ABSTRACT: The operation of the distant-reading gyro-magnetic compass of DGMK-3 type is discussed. The inaccuracy in readings, checking of errors and handling of compass was discussed on the basis of particular examples. Captain Bagrov, while making a left turn, found that the compass needle was indicating 5 degrees to the right. The erroneous reading was caused by inclination of the gyroscope suspension frame in the course of aircraft rolling at 45 degrees. This error seldom occurs and only at angles of 45, 135, 225 and 315 degrees. More often, the failures are caused by bad contacts between

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Card 2/2 9 2

SERGIYENKO, A.P., podpolkovnik med.sluzhby; PAVLOV, G.I., mayor med.sluzhby;
LYTKIN, V.V., kapitan med.sluzhby

Using trucks for the transportation of wounded and sick. Voen.-med.
zhur. no.9:84-85 S '59. (MIRA 13:1)
(TRANSPORT OF WOUNDED)

AGADZHANYAN, N.A.; ZHAROV, S.G.; KALINICHENKO, I.R.; KARPOVA, L.I.;
KAPLAN, Ye.Ya.; KUZNETSOV, A.G.; OSIPOVA, M.M.; MAZIN, A.N.;
SERGIYENKO, A.V.

Effect of various rates of decompression on the human body.
Voen. med. zhur. no.10:49-53 0 '65. (MIRA 18:11)

L 22929-66 EWT(1) SCTB DD

ACC NR: AP6013167

SOURCE CODE: UR/0177/66/000/004/0059/0063

AUTHOR: Agadzhanyan, N. A. (Lieutenant colonel in medical service, 15
Candidate of medical sciences); Sergiyenko, A. V. (Major in medical B
service)

ORG: none 2

TITLE: Character of changes in altitude as a function of decompression
rate

SOURCE: Voyenno-meditsinskiy zhurnal, no. 4, 1966, 59-63

TOPIC TAGS: hypoxia, animal physiology, pressure chamber, decompression, high altitude physiology

ABSTRACT: The authors summarize Western and Soviet Literature dealing with changes in resistance to high altitude as a function of decompression rate, and describe 146 specialized experiments of their own, conducted on white rats weighing 170—230 g. A 40-liter decompression chamber was used to expose the animals to decompression rates of 0.1, 2.0, 25, 75, 150, and 350 m/sec. In determining the maximum altitude endurance limits, cardiovascular and respiratory function as well as behavior of the animals was studied. In a few cases, blood morphology, conditioned reflexes, and rectal temperature were monitored. 2

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L 22927-00

ACC NR: AP6013167

0

Tests were terminated when convulsions occurred. Some results of the experiment are shown in Table 1.

Table 1. Altitude stability as a function of decompression rate.

Decom- pression rate in m/sec	No. of tests	No. of ani- mals killed	Altitude limit in m			Reserve time		
			min.	max.	mean	minimum	maximum	mean
2	26	2	11 700	14 700	13 370	105 min. 35 sec.	131 min. 42 sec.	121 min. 32 sec.
25	30	6	13 050	14 325	13 618	8 " 42 "	9 " 33 "	9 " 8 "
75	22	6	14 150	16 750	16 068	3 " 8 "	3 " 51 "	3 " 32 "
150	38	12	17 050	18 900	18 286	115 "	130 "	123 "
300	30	1	20 000	22 300	21 495	67 "	76 "	72 "

It was found that convulsion characteristics depended on decompression rate: the faster the decompression rate, the more pronounced the convulsion. No dependence was observed between the characteristics of cardiovascular function and decompression rate. Maximum respiratory activity at decompression values of 75—300 m/sec was reached at an altitude of 4000 m; at values of 2—25 m/sec, it was reached at 10,000 m. Depressed respiratory activity as a function of decompression rate occurred at 11,000—14,000 m. Rectal temperature decreased by an average of 8.1C at a rate of 2 m/sec and by 0.9C at 25 m/sec; at

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L 22929-66

ACC NR: AP6013167

75—300 m/sec, no change occurred. Apparently a slow decompression rate induced a state of natural hypothermia. Pressure chamber tests in which the ambient temperature was raised from 21C to 30C revealed that at a temperature of 21C and a decompression rate of 2 m/sec, the altitude limit was 13,370 m, while at a temperature of 30C at the same rate, the limit was 10,221 m. Thus, the experiments revealed an interdependence of changes in altitude stability, decompression rate, and ambient temperature. The conclusion reached was that the mechanisms of adaptation to hypoxia are as yet poorly understood, despite their great importance to aeronautics and astronautics. Orig. art. has: 3 tables. [CD]

SUB CODE: 05, 06/ SUBM DATE: none/ ATD PRESS: 4237

Card 3/3

1. 08/23/00 - FWT(4) SUTB DO/CD

ACC NR: AT6036466

SOURCE CODE: UR/0000/66/000/000/0010/0011

AUTHOR: Agadzhanyan, N.A.; Kalinichenko, I. R.; Kuznetsov, A. G.; Lepikhova, I. I.;
Nikulina, G. A.; Osipova, M. N.; Reutova, M. B.; Sergiyenko, A. V.; Shevchenko, Yu.vv.

ORG: none

TITLE: Effect of rapidly increasing hypoxia on the human organism [Paper presented
at conference on problems of space medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy
kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow,
1966, 10-11

TOPIC TAGS: hypoxia, spirometry, electrocardiogram, human physiology

ABSTRACT:

In order to determine the time available for taking countermeasures during a rapid drop in partial oxygen pressure, the resistance of the body to rapidly increasing hypoxia was studied in 28 human subjects by the re-breathing method using a spirometer filled at the start with 8.5 l of atmospheric air. The O₂ content of this air decreased as the oxygen was used up; CO₂ was chemically absorbed.

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L 08271-67

ACC NR: AT6036/66

The external appearance of the subjects, their behavior, and reported subjective sensations were monitored as a check on their general condition; data were recorded on conditioned reflex activity, brain biocurrents, motor coordination, the functional state of the cardiovascular and respiratory systems and blood oxygen absorption levels; and studies of the composition of peripheral blood and the functional state of the adrenal cortex were made.

The results showed that rapidly increasing hypoxia produces functional changes leading to loss of consciousness if oxygen is not quickly administered. Reserve time (time from beginning to breathe the hypoxic mixture until the hypoxic mixture is cut off) amounted on the average to 6 min 23 sec (5 min 27 sec to 10 min 02 sec). This was equivalent to an "altitude ceiling" of 10150 m (9100 to 11400 m). The O_2 content in the respired air at the end of the experiment was 4.44% ($pO_2 = 31.3$ mm Hg); blood oxygen saturation dropped to an average of 53.2% (42% to 64%). Hypoxia symptoms observed during the experiment included: cyanosis of the epidermis and mucosa; dyspnea, drowsiness, impaired handwriting, and sometimes even muscle spasms in the hands. Many subjects complained of respiratory distress, dizziness, dimness of vision, heat, headache, etc.

1. 03271.67

The amount of time required to solve arithmetical problems increased and motor coordination was impaired. Both the time required to solve problems and the number of errors increased more than three-fold over initial data.

Three phases were distinguished in EEG changes: 1) suppression of the alpha rhythm; 2) reactivation of alpha rhythm; 3) onset of slow waves (2 to 4 per inch).

Frequency and depth of respiration and minute volume increased during hypoxia, and the oxygen requirement and O_2 utilization coefficient decreased. Arterial oxygen saturation decreased from 46% to 98% at the start to 49% to 55% at the end of the experiment.

EKG's made during rapidly increasing hypoxia showed a progressive increase in the pulse rate and a decrease in the amplitude of R and T waves.

Peripheral blood composition immediately and one hour after exposure to hypoxia showed increased erythrocyte counts and hemoglobin content. The amount of 17- α -corticosteroids in the plasma increased from 16 to 17 $\gamma\%$ at the onset of 55.3 to 44.2 $\gamma\%$ during the aftereffect period.

Doc. No. 22: 100 Report 65-1167
Card 3/3 SUB CODE: 00 / SUBM DATE: 00May66

ACC NR: AT6036637

SOURCE CODE: UR/0000/66/000/000/0344/0345

AUTHOR: Sergiyenko, A. V.

ORG: none

TITLE: Question of establishing a relationship between rate of decompression and the altitude tolerance of the organism [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 344-345

TOPIC TAGS: decompression, hypoxia, decompression sickness, biologic respiration, cardiovascular system

ABSTRACT:

The dependence of altitude tolerance on different rates of decompression was studied. Reserve time and altitude ceiling were the criteria used to evaluate altitude tolerance. The classical aviation definition of reserve time was modified; "reserve time" as used here is the time from the beginning of decompression to the appearance of serious dysfunctions. Rats were elevated in a pressure chamber to precalculated "altitude ceiling", depending on the de-

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ACC NR: AT6036637

compression rate used. The experiments ended promptly with cessation of breathing, cardiac activity decrease, or the appearance of convulsions. EKGs and respiration were recorded, and rectal temperatures taken in some of the experiments.

Pressure chamber elevation occurred at various rates in 6 series of experiments on 240 rats: 2 m/sec, 25 m/sec, 75 m/sec, 150 m/sec, 300 m/sec, and 500 m/sec.

Altitude tolerance was found to be clearly dependent on decompression rate: the slower the climb rate, the lower was the "altitude ceiling", and vice versa. Average "altitude ceiling" was 13029 m for a climb rate of 2 m/sec; 13422 m for 25 m/sec; 15930 m for 75 m/sec; 18228 m for 150 m/sec; 21604 m for 300 m/sec; and 25455 m for 500 m/sec. Reserve time was found to vary inversely with climb rate: the slower the climb rate, the longer was reserve time. For instance, reserve time was 132.6 min for a climb rate of 2 m/sec and only 0.9 min for a rate of 500 m/sec.

The dependence of ceiling on climb rate did not hold for low climb rates (2 and 25 m/sec), for which the "altitude ceiling" was approximately the same. It is suggested that an optimal rate of pressure drop exists at which

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ACC NR: AT6036637

Rapid climb rates (75 to 500 m/sec) also commonly result in generalized convulsions. At slow climb rates convulsions do not usually occur, or are mild and brief.

The data show that the climb rate of 2 m/sec, which permits the full development of compensatory mechanisms, is best from the standpoint of altitude tolerance.

[W. A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 4/4

DZHELEPOV, B.S.; PREOBRAZHENSKIY, B.K.; SERGIYENKO, B.A.

Coincidence of conversion electrons during Lu^{173} decay. Refinement of Lu^{173} - Yb^{173} decay scheme. Izv. AN S.S.S.R. Ser. fiz. 22 no.7: 795-807 J1 '58. (MIRA 11:9)

1. Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo gosudarstvennogo universiteta im. A.A. Zhdanova.
(Lutetium--Decay) (Electrons) (Ytterbium--Isotopes)

SENGIYENKO, D. L. -- "The Work of Circles of Young Naturalists in the Schools of the Ukrainian SSR (The History, Content, and Methods of Work in the Light of the Problems of Polytechnic Training and the Preparation of the Students for Practical Activity)." Academy of Pedagogical Sciences RSFSR. Science Research Institute of Teaching Methods. Moscow, 1955 (Dissertation for the Degree of Candidate in Pedagogical Sciences.)

So; 'Knizhaya Letopis' No 3, 1956

SERGIYENKO, D.L., kandidat pedagogicheskikh nauk.

Young naturalists of the Ukraine. Biol. v shkole no.5:67-71 S-0
'57. (MLRA 10:9)

1. Direktor Respublikanskoy stantsii yunykhn naturalistov Minister-
stva prosveshcheniya USSR.
(Ukraine--Nature study)

SERGIYENKO, D.L. [Serhiienko, D.L.]

Extend the activities of children in protecting the nature of
our country. Mat.pro okhor.pryr.na Ukr. no.2:94-100 '60.

(MIRA 13:8)

(Ukraine--Nature study)

SOV/27-58-11-28/29

AUTHOR: Sergiyenko, F., Assistant Director of School

TITLE: Help Given to the Kolkhozes of the Oblast (Pomoshch' kolkhozam oblasti)

PERIODICAL: Professional'no - tekhnicheskoye obrazovaniye, 1958, Nr 11, p 3 of cover (USSR)

ABSTRACT: The staff and students of the Technical School Nr 1 in Luganskaya Oblast' have assumed increased obligations in the manufacture of instruments and equipment, and repair of agricultural machinery for the kolkhozes. The author lists tools made by the school. The school has taken under its patronage the Sovkhoz "Krasnoarmeyets" in the Lozno-Aleksandrovskiy rayon, Luganskaya Oblast'. There is 1 photo showing a student of the Uchilishche mekhanizatsii sel'skogo khozyaystva Nr 12 (Agricultural Mechanization School Nr 12) in the Karaganda Oblast'.

ASSOCIATION: Tekhnicheskoye uchilishche Nr 1 Luganskoy oblasti (Technical School Nr 1, Luganskaya Oblast').

1. Industrial training--USSR 2. Personnel--Performance

Card 1/1

SERGIYENKO, F.I., inzhener.

[Work of a concrete-mixing unit as expressed on an hourly worksheet] Rabota betonorastvornogo uzla po chasovomu grafiky. Moskva [Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture] 1953. 10 p. (MIRA 6:10)

1. Russia (1923- U.S.S.R) Ministerstvo stroitel'stva predpriyatii tyazhe-
loy industrii. Tekhnicheskoye upravleniye. (Concrete construction)

NEYEVIN, Ye.A., inzhener; SERGIYENKO, F.I., inzhener.

Organization of a concrete mixing plant in accordance with an hourly work
schedule. Sbor.mat. o nov.tekh. v stroi. 15 no.9:1-5 '53. (MIRA 6:10)
(Concrete)

SERGIYENKO, F.I.

Information. Prof.-tekh.obr. 15 no.11:3 of cover N '58.
(MIRA 12:1)

1. Pomoshchnik direktora tekhnicheskogo uchilishcha No.1. Luganskoy oblasti.

(Lugansk Province--Farm equipment)
(Krasnoyarsk--Vocational education)

Collective Farms

A field brigade's plan for scientific farming Kolkh. proizv 12 No. 1, 1952.

9. MONTHLY LIST OF RUSSIAN ACCESSIONS, Library of Congress, June 1952. Uncl.

SERGIYENKO, I.N., prof.

Treatment of an acute attack of rheumatic fever. Uch. zap.
Stavr. gos. med. inst. 12:320-321 '63.

Use of Gasan-Dzhalalov's method to stop hiccups. Ibid.:339-340
(MIRA 17:9)

1. Kafedra gosital'noy terapii (zav. prof. I.N. Sergiyenko)
Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

SERGIYENKO, I.N., prof.; BONDARENKO, N.I.

Treatment of thyrotoxicosis with merdazoly1. Uch. zap. Stavr.
gos. med. inst. 12:326-327 '63. (MIRA 17:9)

1. Klinika gospital'noy terapii (zav. prof. I.N. Sergiyenko)
Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

SERGIYENKO, I.N., prof.; SHATSKAYA, P.F., ordinator

Treatment of anemic states by intrarectal administration
of heterogenic blood. Uch. zap. Stav. gos. med. inst. 12:
328-329 '63. (MIRA 17:9)

1. Kafedra gospital'nyy terapii (zav. prof. I.N. Sergiyenko)
Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

DNEPROVA, T.I.; PYATNITSKIY, N.P., prof., nauchnyy rukovoditel' raboty;
SERGIYENKO, I.N., prof., nauchnyy rukovoditel' raboty.

Diagnostic value of determining pepsin in the stomach contents
and uropepsin. Uch. zap. Stavr. gos. med. inst. 12:332-333 '63.
(MIRA 17:9)

SERGIYENKO, I.N., prof.; YELANSKAYA, R.A.

Treatment of hyperacid gastritis, peptic ulcers of the
stomach and the duodenum. Uch. zap. Stavr. gos.med. inst.
12:338 '63. (MIRA 17:9)

1. Kafedra gosital'noy terapii (zav. prof. I.N. Sergiyenko)
Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

SERGIYENKO, I.N., prof.; GRABIAS, M.I.

Diagnosis and clinical aspects of systemic lupus erythematosus.
Uch. zap. Stavr. gos. med. inst. 12:324-325 '63.

(MIRA 17:9)

1. Kafedra gospi'tal'noy terapii (zav. prof. I.N. Sergiyenko)
Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

VISHNEVETSKIY, Aleksandr Il'ich; SERGIYENKO, Ivan Stepanovich; STERLIGOV,
V.L., inzhener-mayor, red.; KRASAVINA, A.M., tekhn. red.

[Paratetron; new switching elements] Parametron; novye perekliuchaiushchie
elementy. Moskva, Voen. izd-vo M-va obor. SSSR, 1961. 66 p.

(MIRA 14:8)

(Electronic digital computers) (Switching theory)

BAZHURA, Panteley Somenovich; SERGIYENKO, Ivan Toront'yevich
[Serhiienko, I.T.], agronom, Geroy Sotsialisticheskogo
Truda; ZYUZ'KO, Yevgeniy Petrovich; FEDULAYEV, Andrey
Luk'yanovich; VINNITSKIY, S.[Vinnyts'kyi,S.], red.;
MOLCHANOVA, T., tekhn. red.

[Additional crops] Dodatkovy vrozhai. Odesa, Odes'ke knyzh-
kove vyd-vo, 1959. 22 p. (MIRA 15:7)

1. Predsedatel' kolkhoza "Bat'kivshchyna" Kotovskogo rayona
(for Bazhura). 2. Glavnyy agronom kolkhoza "Ukraina" Odesskogo
rayona (for Zyuz'ko). 3. Glavnyy inspektor po rasteniyevod-
stvu Odesskogo **oblastnogo** upravleniya sel'skogo khokhozyaystva
(for Fedulayev).

(Odessa Province--Forage plants)

AUTHOR: Sergiyenko, I.V. SOV/113-58-12-13/17

TITLE: The Automatization of Press Operations (Avtomatizatsiya pressovyykh rabot)

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nr 12, pp 38-39 (USSR)

ABSTRACT: The casings for ignition coils of automobile engines are manufactured by cold pressing (Figure 1). At the Moscow plant ATE-2, the charging of the presses and the transport from press to press are automatized by using gravitation-type transport devices. A general view of two automatized presses is given in Figure 2. A chain transporter is shown in Figure 3. The new devices have eliminated several workers. There are 3 sets of diagrams.

ASSOCIATION: ATE-2

Card 1/1

25(1)

SOV/117-59-5-5/30

AUTHOR: Sergiyenko, I.V. , Engineer

TITLE: the
The Automatization' of/ Interoperational Handling of Blanks
During Drawing

PERIODICAL: Mashinostroitel', 1959, Nr 5, pp 12-13 (USSR)

ABSTRACT: The Moskovskiy zavod ATE-2 (Moscow ATE-2 Plant) has developed
and is using inexpensive vertical chain conveyers with a handling device working by gravity, for the automatic handling of blanks (ignition coil casings for car engines) between two presses. Detailed design data is given. There are 2 diagrams.

Card 1/1

SERGIYENKO, I.V.

Semiautomatic machine tool for continuous milling of spiral grooves in rolls.
Stan.1 instr. 30 no.3:34 Mr '59. (MIRA 12:3)
(Milling machines)

LYUBCHENKO, Georgiy Georgiyevich; SERGIYENKO, Ivan Vasil'yevich;
KORCLYUK, V.S., retsenzent; YUSHCHENKO, Ye.L., retsenzent;
IL'ICHEVSKIY, S.A., red.

[Computers and programming] Matematicheskie mashiny i programirovanie. Kiev, Izd-vo Kievskogo univ., 1963. 219 p.
(MIRA 17:7)

ACCESSION NR: AT4019738

S/0000/63/000/000/0077/0080

AUTHOR: Nikitin, A. I.; Sergiyenko, I. V.

TITLE: Problems of control automation by several single-type entities using electronic computers

SOURCE: AN UkrRSR. Insty*tut kiberneti*ky*. Obchy*slyuval'na matematy*ka i tekhnika (Computer mathematics and engineering). Kiev, Vy*d-vo AN UkrRSR, 1963, 77-80

TOPIC TAGS: control algorithm, machine memory estimate, machine speed estimate, Ressemer converter

ABSTRACT: The author raises questions on how to create algorithms for control by n units of the same type. Formulas are given for estimating the machine's memory and speed since these formulas are necessary in order to realize such control algorithms on electronic computers.

Also, numerical data are given for the calculation of the computer's parameters in creating algorithms for control in Ressemer converters at the Dzerzhinskiy metallurgical factory. Orig. art. has: 3 equations.

Card 1/2

ACCESSION NR: AT4019738

ASSOCIATION: none

SUBMITTED: 19Sep63

DATE ACQ: 06Jan64

ENCL: 00

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

Card 2/2

GARGER, K.S.; SERGIYENKO, I.V.; VOLKOV, L.G.

Using computers for calculating the chemical composition of the
cast iron poured from the mixer into the converter. Mat.i gornorud.
prom. no. 2:24-26 Mr-Ap '64. (MIRA 17:9)

L 18306-65 AFMD(c)/ASD(a)-5/RAEM(a)/AEDC(a)/AFETR/SSD/AETC(p)/RAEM(d)/ESD(dp)
ACCESSION NR: AP4049185 JXT(EX) S/0102/64/000/005/0015/0021

AUTHOR: Sergiyenko, I. V. (Kiev) 5

TITLE: Method for solving the problem of finding extremum values

SOURCE: Avtomatyka, no. 5, 1964, 15-21

TOPIC TAGS: automatic control, automatic control design, automatic control system, automatic control theory

ABSTRACT: A method of finding the extremum of a discrete-argument function is suggested. P-minimum is considered as a solution of the problem, and a method of finding this minimum is indicated. In the general case, a number of local minima are obtained; by selecting the minimum minimorum, the absolute minimum can be approximated with a high probability. Orig. art. has: 5 formulas.

ASSOCIATION: none

SUBMITTED: 18Feb64

SUB CODE: IE

NO REF SOV: 003

ENCL: 00

OTHER: 000

Card 1/1

SERGIYENKO, I.V. [Serhiienko, I.V.]

Abstract formulation of a problem concerning the automatization of production. Dop. AN URSR no.2:177-179 '65.

(MIRA 18.2)

1. Institut kibernetiki AN UkrSSR.